

Rec'd PCT 29 APR 2005
10/533249

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number
WO 2004/041921 A3

- (51) International Patent Classification⁷: C08K 5/52
- (21) International Application Number:
PCT/US2003/034351
- (22) International Filing Date: 28 October 2003 (28.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/422,682 31 October 2002 (31.10.2002) US
- (71) Applicant (for all designated States except US): AKZO NOBEL N.V. [NL/NL]; Velperweg 76, P.O. Box 9300, NL-6800 SB Arnhem (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEVCHIK, Sergel, V. [—/US]; 51 Harrison Street, Croton-on-Hudson, NY 10520 (US). ALESSIO, Gerald, R. [US/US]; 129 Lincoln Blvd., Emerson, NJ 07630 (US). BRIGHT, Danielle, A. [US/US]; 790 Riverside Drive #7E, New York, NY 10032 (US).
- (74) Agent: FENNELLY, Richard, P.; Akzo Nobel Inc., Intellectual Property Department, 7 Livingstone Avenue, Dobbs Ferry, NY 10522-3408 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
15 July 2004
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/041921 A3

(54) Title: METHOD OF RETAINING THE HYDROLYTIC STABILITY OF FLAME RETARDED POLYMER COMPOSITION

(57) Abstract: The hydrolytic stability of a polycarbonate-containing resin composition, which comprises an arylene-bridged oligomeric phosphate flame retardant can be improved by the addition of an effective amount of a neopentylglycol bis (diphenyl phosphate) flame retardant for such hydrolytic stability improvement.

10/533249

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 03/34351

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C08K5/52

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C08K C07F C09K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96/11977 A (AKZO NOBEL NV; BRIGHT DANIELLE A (US); MOY PAUL Y (US)) 25 April 1996 (1996-04-25) cited in the application page 2, line 4-29; claims 1,4; examples 3-5	1-4
A	US 5 204 394 A (PRATT CHARLES F ET AL) 20 April 1993 (1993-04-20) cited in the application abstract column 4, line 30 - column 5, line 4	1-4
A	CA 2 157 082 A (BAYER AG) 8 May 1996 (1996-05-08) the whole document	1-4
-/-		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *G* document member of the same patent family

Date of the actual completion of the international search

15 April 2004

Date of mailing of the international search report

21/04/2004

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Meiners, C

INTERNATIONAL SEARCH REPORT

Patent Application No
PCT/US 03/34351

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 1 547 307 A (VELSICOL CHEMICAL CORP) 6 June 1979 (1979-06-06) page 1, line 10 - line 33	1-4
A	WO 96/11996 A (AKZO NOBEL NV; BRIGHT DANIELLE A (US); AARONSON ALAN M (US); PIRRE) 25 April 1996 (1996-04-25) abstract; claim 1; examples 2-4, 11	1-4
A	EP 0 909 790 A (GEN ELECTRIC) 21 April 1999 (1999-04-21) cited in the application paragraphs '0017!-'0022!	1-4

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/US 03/34351

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9611977	A	25-04-1996	CA 2202164 A1 EP 0785966 A1 JP 10507472 T JP 3405543 B2 WO 9611977 A1	25-04-1996 30-07-1997 21-07-1998 12-05-2003 25-04-1996
US 5204394	A	20-04-1993	NL 8802346 A US RE36188 E AU 630629 B2 AU 4334989 A BR 8907094 A DE 68912700 D1 DE 68912700 T2 EP 0363608 A1 ES 2061834 T3 JP 2115262 A KR 9305826 B1 WO 9003417 A1	17-04-1990 06-04-1999 05-11-1992 18-04-1990 08-01-1991 10-03-1994 25-08-1994 18-04-1990 16-12-1994 27-04-1990 25-06-1993 05-04-1990
CA 2157082	A	08-05-1996	CA 2157082 A1	08-05-1996
GB 1547307	A	06-06-1979	CA 1085867 A1 DE 2707498 A1 FR 2341587 A1 IT 1075657 B JP 52102227 A	16-09-1980 01-09-1977 16-09-1977 22-04-1985 27-08-1977
WO 9611996	A	25-04-1996	WO 9611996 A1	25-04-1996
EP 0909790	A	21-04-1999	CN 1218072 A ,B DE 69820948 D1 EP 0909790 A1 JP 11189714 A SG 85605 A1 TW 512161 B	02-06-1999 12-02-2004 21-04-1999 13-07-1999 15-01-2002 01-12-2002